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EG&G
ROCKY FLATS

Proposed Action Memorandum Seep Collection and Treatment Operable Unit 7 Present Landfill (IHSS 114) and Inactive Hazardous Waste Storage Area (IHSS 203) Final Report

December 1994

ADMIN RECORD

EXECUTIVE SUMMARY

This Seep Collection and Treatment Proposed Action Memorandum presents the U S Department of Energy's removal action to address the seep flowing from the Present Landfill into the East Landfill Pond, Operable Unit (OU) No 7 at the Rocky Flats Environmental Technology Site The overall objective of the collection system is to eliminate discharge of F039 listed waste contained in the seep water to a surface water body

Compliance with potential applicable or relevant and appropriate requirements for seep water that may be a source of contamination for groundwater and surface water will be achieved through collection of the seep, treatment, as required, of the collected flow to reduce concentrations of volatile organic compounds, semi-volatile organic compounds, metals, and radionuclides, and subsequent release of treated water to surface waters

Water will be collected at the seep with a precast manhole base section installed downgradient of the seep Perforated polyvinyl chloride pipe laid in drain rock will collect and feed flow into the collection sump A submersible pump will deliver seep water from the sump to storage tanks located on the ridge immediately north of the East Landfill Pond dam along an existing gravel road Seep water will then be transported by tanker truck to the designated treatment facility

Construction is scheduled for May 1995 to July 1995 The collection system is designed to be compatible with source containment as a presumptive remedy for final closure of the landfill in July 1997

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1 PURPOSE

The purpose of this Seep Collection and Treatment Proposed Action Memorandum (PAM) is to present the U S Department of Energy's (DOE's) removal action for the collection and treatment of water seeping from the Present Landfill into the East Landfill Pond, Operable Unit (OU) No 7 at the Rocky Flats Environmental Technology Site (RFETS) RFETS is located in Jefferson County, Colorado, as shown in Figure 1-1 This document is the first of two response action documents planned for OU 7 The second document, the Landfill Closure Interim Measure/Interim Remedial Action (IM/IRA) Decision Document, will focus on landfill closure and groundwater remediation using the presumptive remedy approach (EPA, 1993)

The overall objective of the seep collection system is to eliminate discharge of F039 listed waste contained in the seep water to a surface water body The removal action will achieve potential applicable or relevant and appropriate requirements (ARARs) for seep water that may be a source of contamination of groundwater and surface water, if practicable, through collection and treatment of seep water to remove organics, metals, and radionuclides

Environmental restoration activities at RFETS are pursuant to an Interagency Agreement (IAG) signed by the DOE, the U S Environmental Protection Agency (EPA), and the State of Colorado Department of Public Health and Environment (CDPHE) dated January 22, 1991 (DOE, 1991) CDPHE is the lead regulatory agency for the IAG program at OU 7

2 BACKGROUND AND DESCRIPTION

The location and mission of RFETS, location and history of remedial actions at OU 7, characteristics of the seep, and other actions to date are described in the following sections

2 1 Rocky Flats Environmental Technology Site

The RFETS is located at the foot of the Rocky Mountains in northern Jefferson County, Colorado The site is approximately 16 miles northwest of Denver in Sections 1 through 4 and 9 through 15 of Township 2 south, Range 70 west It is near the suburban communities of Westminster, Broomfield, and Arvada The site covers approximately 6,550 acres Approximately 400 acres were used for industrial activities

The primary mission of RFETS has been production of components for nuclear weapons Operations at the plant began in 1952 In 1989, many of the production functions at the plant were suspended In January 1992, the decision was made not to resume plutonium parts production The site is currently in transition from a weapons production site to a materials management, environmental restoration, and waste management site

More detailed site background information is presented in the OU 7 Final Work Plan Technical Memorandum (OU 7 Final Work Plan) (DOE, 1994a)

2 2 OU 7 Site Description

OU 7 is located north of the industrial area at the western end of No Name Gulch For the purpose of selecting remedial actions, OU 7 is divided into the following four areas

- Present Landfill (Individual Hazardous Substance Site [IHSS] 114)
- Inactive Hazardous Waste Storage Area (IHSS 203)
- East Landfill Pond
- Spray evaporation areas adjacent to the East Landfill Pond (IHSS 167 2 and IHSS 167 3)

Each of these areas is shown in Figure 2-1 and described in detail in the OU 7 Final Work Plan (DOE, 1994a)

The seep addressed in this report is located near the base of the east face of the Present Landfill (IHSS 114) Operation of the landfill was initiated in 1968 to provide for disposal of

nonradioactive solid wastes and will continue until the landfill is closed in 1997 The Present Landfill covers an area of approximately 27 acres

In 1973, tritium was detected in water seeping from the landfill In response, monitoring of waste for radionuclides prior to burial was initiated to prevent further disposal of radioactive material, and interim response measures were developed to control the generation and migration of the landfill leachate Locations of the landfill structures (surface-water diversion ditch, subsurface drainage control, and slurry walls) constructed as interim response measures that still exist are shown in Figure 2-1 and described in detail in the OU 7 Final Work Plan (DOE, 1994a)

Records indicate that some hazardous waste was disposed at the landfill, disposal of hazardous waste was discontinued in 1986

2 3 Characteristics of the Seep at SW097

The existing leachate collection system, which is part of the subsurface drainage control system at the landfill, is only partially effective Between 1977 and 1981, portions of the leachate collection system were buried during landfill expansion Although the intercept trench is effective in keeping leachate within the northern, southern, and western limits of the landfill, there is a seep along the eastern boundary of the landfill just above the pond

Surface water sampling station SW097 is located where the water seeps from the landfill into the pond The physical area of the seepage face is believed to vary over the course of the year Based on visual observations however, the maximum seep width is estimated at 8 feet

Historical data presented in Table 2-1 were used to estimate an average flow rate at the seep Specific information on the method of measurement and the relationship to storm events for most of these data is not available Using RFETS precipitation data, no relationship between storm events and measured high flows shown in the table could be established Thus, disregarding measurements believed to be erroneous, the average flow at the seep is estimated to be 3 6 gallons per minute (gpm)

Table 2-1
Historical Seep Flow Rates at SW097

Date of Measurement	Flow Rate (gpm)	Flow Rate (cfs)
06/16/88	2 2	0 005
04/06/89	26 9[1]	0 06[1]
05/19/89	0 0	0 0
06/20/89	0 0	0 0
07/07/89	3 6	0 008
08/02/89	4 0	0 009
09/06/89	2 2	0 005
10/09/89	24 7[1]	0 05[1]
11/07/89	1 8	0 004
12/05/89	1 8	0 004
08/29/90	6 7[2]	0 015[2]
12/17/92	4 48	0 01
01/25/93	4 48	0 01
02/26/93	10 32	0 023
03/24/93	04 48	0 01
03/29/93	4 48	0 01
Average	**3 61**	—

[1] *Believed to be an erroneous flow measurement Not included in calculation of average flow*

[2] Measured using a Palmer Bowlus flume

Definitions

cfs *cubic feet per second*
gpm gallons per minute

The water surfacing at the seep (SW097) is composed of surface water and groundwater that have infiltrated the landfill and mixed with leachate from the waste A waste determination of the seep was made based on historical data detailing wastes disposed in the landfill According to the 1986 Waste Stream Identification Characterization (Rockwell International, 1986) report, multiple waste streams believed to contain Resource Conservation and Recovery Act (RCRA) listed hazardous wastes were disposed in the Present Sanitary Landfill prior to 1986 From a RCRA perspective, the surface water containing F039 hazardous waste constituents is a "contained-in" waste This waste must be handled as a RCRA regulated hazardous waste, with the EPA waste code F039, when the seep water is actively managed (e g , in piping, a tank, or a container)

Chemicals in the seep that exhibit concentrations above background include total and dissolved metals, radionuclides, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) (DOE, 1994a) and are shown in Table 2-2

Table 2-2
Concentrations of Contaminants in Seep Water

Contaminants of Concern	Average Concentration (µg/L)	Maximum Concentration (µg/L)
Total Metals		
Antimony	22	60 4
Barium	640	1 550
Calcium[1]	151 000	212 000
Iron	80 510	155 000
Lithium	48	107
Magnesium[1]	34 719	49 000
Manganese	1 ^11	2 490
Potassium[1]	6 436	11 700
Silicon[1]	13 508	44 000
Sodium[1]	71 367	110 000
Strontium	919	1 370
Tin	67	306
Zinc	2 945	16 000
Radionuclides[2]		
Gross Beta	11	17
Strontium-89 90	1 3	4 06
Tritium	349	1 500
Uranium 235	0 1	0 7
Water Quality Parameters		
Nitrite	30 33	63
Volatile Organic Compounds		
1 1 Dichloroethane	6	10
2 Butanone	12	76
2 Hexanone	5	10
4 Methyl 2 pentanone	11	87
Acetone	33	220
Benzene	2	5
Carbon Disulfide	3	6
Chloroethane	22	57
Chloromethane	5	10
Ethylbenzene	13	18
Methylene Chloride	14	190
Tetrachloroethene	2	5
Toluene	38	88
Total Xylenes	14	25
Trichloroethene	2	5
Vinyl Acetate	7	49
Vinyl Chloride	5	11
Semivolatile Organic Compounds Appear on the next page		

Contaminants of Concern	Average Concentration (µg/L)	Maximum Concentration (µg/L)
Semivolatile Organic Compounds		
2 4-Dimethylphenol	5	10
2-Methylnaphthalene	16	23
4-Methylphenol	4	10
Acenaphthene	3	3
Bis(2-ethylhexyl)phthalate	5	12
Dibenzofuran	1	2
Diethyl Phthalate	3	10
Fluorene	2	3
Naphthalene	18	22
Phenanthrene	4	5

Source (EG&G 1994a)

[1] Nutrient species and will not be considered for treatment

[2] Radionuclide activities are in picocuries per liter

The East Landfill Pond exhibits typical wetland vegetation as discussed in the potential ARARs section (Section 3 6) of this PAM

2 4 Other Actions To Date

A Phase I RCRA Facility Investigation/Remedial Investigation (RFI/RI) was conducted at OU 7 in 1992 and 1993 to characterize the site features, describe contaminant sources, and determine the nature and extent of contamination Prior to the completion of Phase I, the focus of the investigations changed as a result of the adoption of a presumptive remedy strategy

This PAM and the forthcoming IM/IRA for OU 7 are based on use of presumptive remedies as a method to streamline site investigation and remedial action selection based on historical data from successful remedial actions at similar sites Source containment is the designated presumptive remedy for Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) municipal landfills (EPA, 1993) The containment presumptive remedy consists of the following elements

- institutional controls
- landfill cap
- landfill gas control (and treatment if necessary)
- source area groundwater control to contain plume
- leachate collection and treatment

This remedial action, collection and treatment of seep water, is compatible with source containment as a presumptive remedy for the landfill

3 REMOVAL ACTION

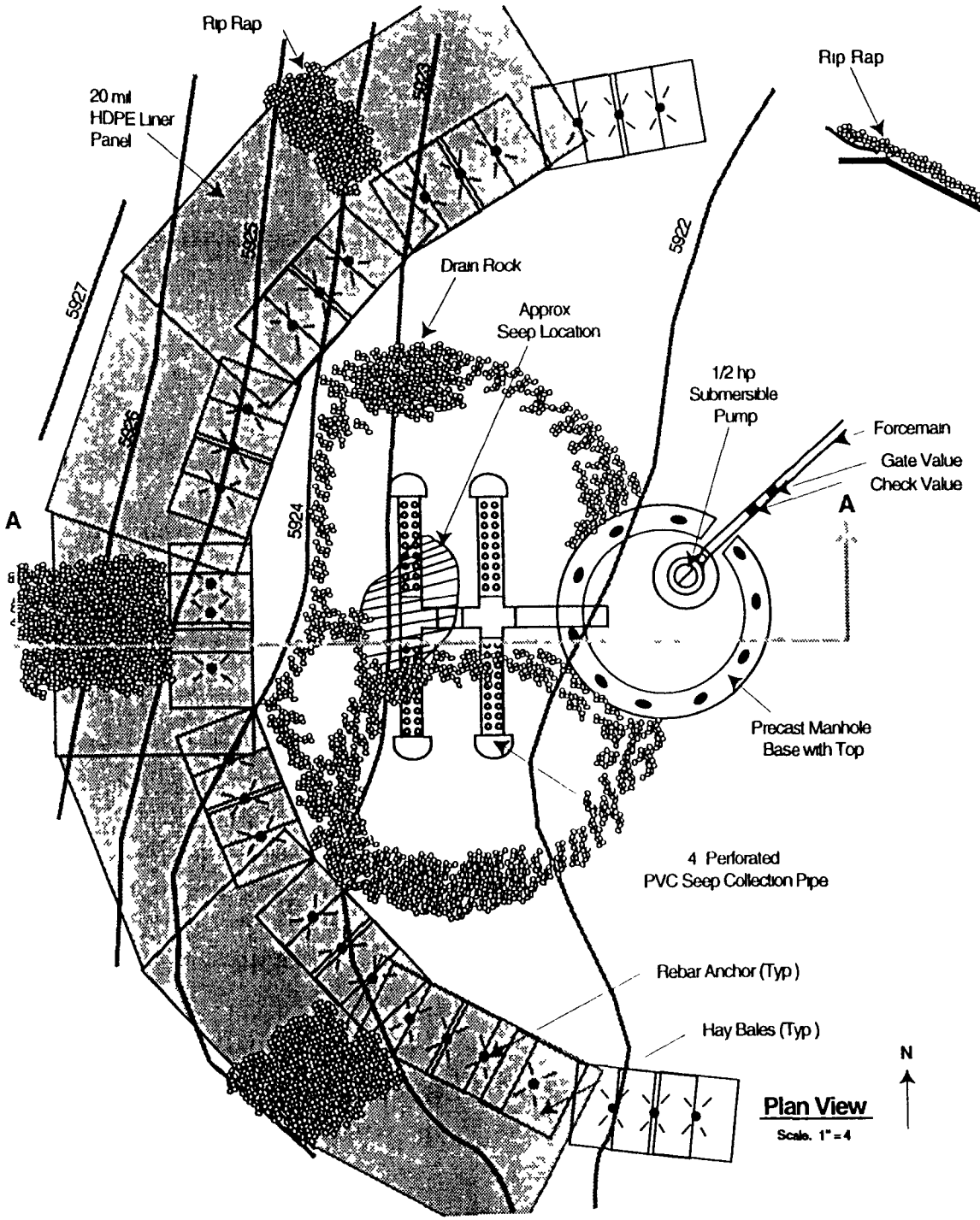
A description of the removal action is presented in this section Waste management considerations, consistency with long-term actions, and potential ARARs are also discussed

3 1 Description

The seep collection and storage facility, shown in Figure 3-1, will consist of a temporary seep collection system, transmission forcemain, and permanent storage facility The system will intercept and contain seep water This action is not intended to collect all flows leaching from the landfill and entering the pond Some seepage may bypass or overflow the collection system, but these flows will be addressed by a downstream collection system to be installed during landfill closure

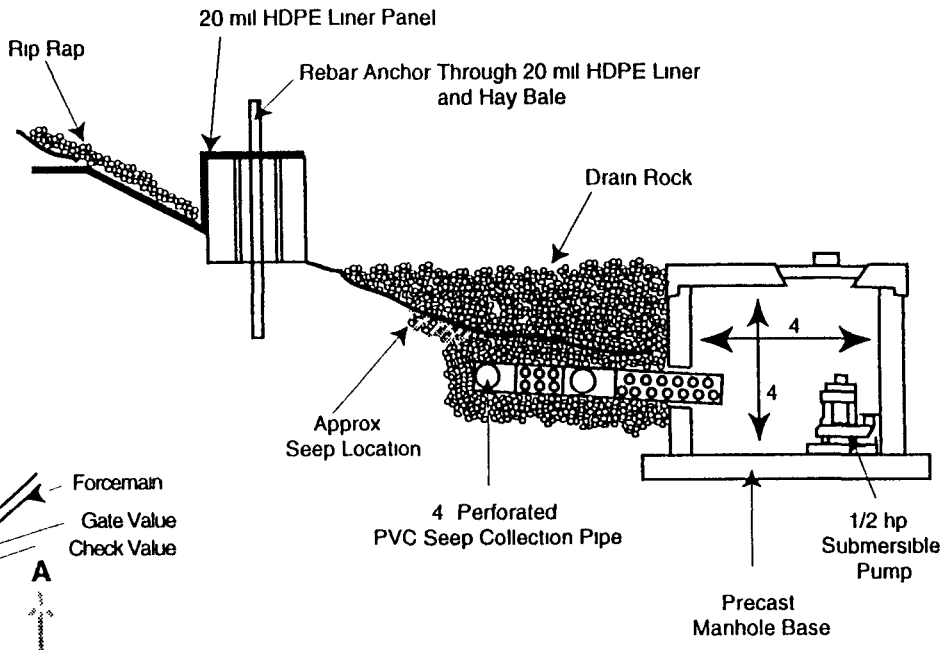
The seep water will be collected at SW097 with a temporary system, including 4-inch perforated polyvinyl chloride (PVC) collection pipe, drain rock, a precast manhole base section, and a submersible pump As shown in Figure 3-2, the 4-inch perforated PVC collection pipe will be placed just downstream of the seep and backfilled with drainrock to direct the seep flow to the precast manhole A ½-horsepower pump will deliver the flow to the storage facility via a 2-inch double wall polypropylene forcemain At an average influent flow of 3 6 gpm and an estimated pumping rate of 26 gpm, the pump will cycle approximately three times per hour Power will be run from the DOE firing range to the storage area as shown in Figure 3-1

A temporary diversion dike consisting of hay bales, liner material, and riprap will be placed upstream of the seep to prevent surface water runoff and sediments from entering the seep collection system (Figure 3-2)



Plan View

Scale. 1" = 4



Section A-A

Scale 1 = 4

U S Department of Energy
Rocky Flats Environmental Technology Site, Golden Colorado

Temporary Seep Collection Details

Action Memorandum	Operable Unit No 7
Date November 1994	Figure 3-2

M ...\Seep collection Facility.dr10/7/94

Two double-contained crosslink polyethylene tanks will provide a storage capacity of 13,000 gallons each At an average flow of 3 6 gpm, the two tanks have a combined capacity of five days The stored seep water will be transported as necessary to the designated treatment facility by tanker truck In the event the tanks reach maximum capacity, a high-level switch will shut off the sump pump and activate a beacon light on top of the control panel Seep flow will back up in the manhole

The seep water will be trucked to the appropriate OU 1, OU 2, or proposed sitewide treatment facilities The designation of the facility will be made by DOE prior to actual treatment upon CDPHE and EPA approval

The OU 1 facility consists of ultraviolet oxidation and ion exchange units The OU 2 facility includes chemical precipitation/filtration and granular activated carbon (GAC) units The proposed sitewide facility is a combination of OU 1, OU 2, new pretreatment facilities, and additional storage capacity

Discussions with treatment facility operators indicate that each of the facilities has the capacity and the capability to effectively treat the chemicals found in the seep However, no acceptance criteria or removal efficiencies for the proposed sitewide treatment facility are available at this writing The criteria would depend on the treatment train and likely be a combination of the OU 1 and OU 2 criteria with modifications for the new pretreatment facilities

The following assumptions are incorporated into the development of the PAM

- Drainage of the pond as necessary to accommodate construction will occur as a separate action prior to construction of the seep collection system
- Design flows are 3 6 gpm average and 6 7 gpm maximum
- The designated pretreatment facility will be operational when construction of the collection system is complete

3 2 Design

The Title II (95%) design for the OU 7 seep collection system includes detailed drawings and specifications of the temporary seep collection system and permanent storage facility

3 3 Waste Management Considerations

Approximately 5 cubic yards of material excavated during construction will be disposed at the Present Landfill Although minimal dewatering will be required as part of this action, any water from dewatering during construction will be pumped to the East Landfill Pond

3 4 Consistency with Long-Term Actions

The removal action is designed with permanent storage tanks located outside the proposed extent of the cap so that they can be used for groundwater storage during post-closure remediation

3 5 Evaluation of Alternatives

Four alternatives to the removal action were evaluated in terms of effectiveness, implementability, and cost The *Technology Literature Research* (EG&G, 1994b) identified three collection technologies for the landfill seep extraction wells, a collection sump, and subsurface drains The "no action" alternative was also considered, although action is mandated under the Statement of Resolution on the Pondwater IM/IPA by the Senior Executive Committee of the IAG

The no action alternative would eliminate the negative short term impacts due to excavation and construction However, it would not reduce the contaminant loading to the East Landfill Pond and the associated long term negative impacts on the wetlands and wildlife habitat Therefore, the "no action" alternative was used primarily as a baseline for comparison with other alternatives

Of the three technologies, the collection sump was retained because it is a simple, low-cost, effective method that can easily address the low flows Extraction wells and subsurface drains were eliminated because limited hydrogeologic information was available for design Further, both would draw groundwater in addition to seep water, thus increasing the volume of water and the overall cost and would require a downgradient barrier to prevent the collection of downstream water Because it requires a minimum amount of excavation and construction activity, the collection sump also had the lowest environmental impact

The collection sump was the most compatible with the presumptive remedy of capping the landfill The components of this alternative are low cost or can be removed easily prior to capping for reuse during the IM/IRA

3 6 Potential ARARs

Potential ARARs for OU 7 are discussed in detail in *Potential Applicable or Relevant and Appropriate Requirements for Operable Unit No 7* (EG&G, 1994b)

EPA guidance directs that cleanup actions presume that groundwater be considered a potential source of drinking water unless site-specific factors indicate otherwise Therefore, federal and state chemical-specific water standards have been listed as potential ARARs for OU 7 They include the following

- Safe Drinking Water Act maximum contaminant levels (MCLs)
- RCRA groundwater protection standards
- Colorado Water Quality Control Act surface-water standards (general and site-specific)
- Colorado Water Quality Control Act groundwater standards (general and site-specific)
- Colorado primary drinking water regulations

The area along the shoreline of the East Landfill Pond has been designated as a wetland by the U S Army Corps of Engineers (COE, 1994) Tall marsh occurs on the edge of the pond, short marsh occurs north and south of the pond throughout the spray evaporation areas Consequently, the Clean Water Act Section 404 permitting requirements and 10 CFR 1022 have been identified as potential ARARs

The removal action is not required to comply with the Floodplain Environmental Review Requirements in 10 CFR 1022, because the floodplains at RFETS do not meet the definition in the regulation (DOE, 1994b)

The Endangered Species Act, Bald and Golden Eagle Protection Act, and the Colorado Nongame, Endangered or Threatened Species Conservation Act have all been identified as potential ARARs because of the existence of regulated species under those acts in and around RFETS No studies address the presence of wildlife at OU 7, however, studies measuring the presence of plant and animal life at RFETS indicate that several regulated species are located at the site OU 7 has been identified as potential habitat for Preble's Meadow Jumping Mouse, which is a candidate for listing Neither RFETS nor OU 7 has been identified as critical habitat for any regulated species (DOE, 1994a)

4 ENVIRONMENTAL IMPACTS

The potential environmental impacts of the removal action are discussed in the following sections

4 1 Air Quality

There are two possible air quality impacts as a result of the removal action potential VOC releases during collection, storage, and treatment of the seep water and fugitive dusts as a result of excavation and construction activities The collection, storage, and treatment facilities are closed systems and will therefore have a minimum impact on air quality Emissions would be controlled during construction by use of appropriate dust suppression methods as specified in the Health and Safety Plan

4 2 Water Quality

The removal action will reduce the contaminant loading to the East Landfill Pond The seep is believed to be the source of the radionuclides, VOCs, and SVOCs present in East Landfill Pond sediments (DOE, 1994a) In addition, collected waters will be treated to meet ARARs Although construction activities may temporarily increase erosion, the stormwater diversion dike is designed to minimize erosion at the collection sump

4 3 Terrestrial Impacts

Plant and animal life may be negatively impacted by the removal action As discussed in Section 3 6, wetlands have been identified along the shoreline of the East Landfill Pond Approximately 75 square feet of wetlands will be impacted by the removal action However, replacement of damaged wetlands will be addressed under the Landfill Closure IM/IRA Decision Document, resulting in no net impact

OU 7 has been identified as potential habitat for Preble's Meadow Jumping Mouse, which is a candidate for listing However, neither RFETS nor OU 7 has been identified as critical habitat for any regulated species (DOE, 1994a)

Prior to construction of the seep collection system, DOE will ensure the protection of plant and wildlife species of concern by evaluation of proposed field activities using procedure 1-DO6-ERP-END 03, "Identification and Protection of Threatened, Endangered, and Special-Concern Species "

4 4 Archaeology and Historic Sites

No archaeological or historic sites have been identified at OU 7

4 5 Short- and Long-Term Productivity

Land adjacent to the seep is presently an operating landfill The landfill will operate until it is closed in 1997 The area, including the collection system, will be capped as part of landfill closure The removal action will not affect present or future use of the site In addition, equipment and materials will be reused to support final closure wherever possible

4 6 Exposure Pathways

The removal action removes the seep water that may be a source of contamination for both surface water and groundwater thus eliminating potential pathways for further migration Potential exposures by RFETS workers during construction and operation will be mitigated by following the Site-Specific Health and Safety Plan

4 7 Commitment of Resources

The scope of the removal action is small, and the material and human resources necessary for construction and operation are likewise relatively small No significant commitments of valuable resources are involved

4 8 Transportation Impacts

The impacts on health from transportation during the removal action include the potential for pollution and accident-related impacts Transportation of construction materials will likely be limited to a 50-mile radius Trucking of collected seep water to the designated treatment facility is estimated to total 10 miles per week Transportation impacts are minimal

4 9 Cumulative Impacts

Because of the small scope and interim nature of the removal action, the cumulative negative impacts are limited Factors specified in the National Contingency Plan (NCP) Section 300 415(b)(2) indicate that a removal action is appropriate for the OU 7 seep to address potential threats to public health and welfare and the environment

5 PROJECT SCHEDULE

The accelerated schedule for the Seep Collection and Treatment PAM complements the Table 6 milestones in the IAG The proposed milestone schedule is provided in Table 5-1

Table 5-1
Removal Action Milestone Schedule

Milestone	Date
Submit PAM to CDPHE/EPA/Public	10/13/94
Receive Comments	11/14/94
Submit Final PAM & Response Summary to CDPHE/EPA/DOE	11/30/94
Approval of PAM	12/14/94
Begin Construction	05/15/95
Begin Seep Collection	08/16/95

6 REFERENCES

COE 1994 U S Corps of Engineers Omaha District, Wetlands Mapping and Resource Study August

DOE 1991 Federal Facility Agreement and Consent Order (Interagency Agreement [IAG] U S DOE, U S EPA, and CDH), U S Department of Energy, Washington D C January

DOE 1994a Final Work Plan Technical Memorandum for Operable Unit No 7 Rocky Flats Plant, Golden, Colorado September

DOE 1994b Memorandum Guidance on the Application of Floodplains Regulations to Rocky Flats Plant From Shirley J Olinger, Acting Assistant Manager Environment, Safety and Health To T G Hedahl, Associate General Manager EG&G May 3, 1994

EG&G 1994a Technology Literature Research Operable Unit No 7, Rocky Flats, Golden, Colorado April

EG&G 1994b Potential Applicable or Relevant and Appropriate Requirements for Operable Unit No 7 - Present Landfill (IHSS 114) and Inactive Hazardous Waste Storage Area (IHSS 203) EG&G Rocky Flats, Inc , Golden, Colorado

EPA 1993 Presumptive Remedy for CERCLA Municipal Landfill Sites EPA/540/F-93/035 September

Rockwell International 1986 Waste Stream Identification Characterization, Rocky Flats Plant, Areas 1-4 W O 2029-13-04-0001 Rockwell International, Rocky Flats Plant, Golden, CO

Responses to Comments from CDPHE and EPA
Draft Seep Collection and Treatment
Proposed Action Memorandum
Operable Unit No. 7

1 Comment

The seep water should be double contained from the time it leaves the sump pump This would require the 2-inch piping which delivers the water up to the tanks to be double-walled rather than single walled

Response

The design will have double-walled piping rather than the single-walled piping from the collection box to the tanks

2 Comment

The high-level alarm/pump shutoff should be positioned so that it will activate when there is 2 feet of freeboard remaining in the tanks

Response

The high-level alarm/pump shutoff is positioned with 1 to 1 5 feet or freeboard remaining in the tanks This provides an additional volume of 1,000 gallons to 1,700 gallons

3 Comment

Has spill/drip containment at the tanks been planned?

Response

The standard operating procedure for pumping and transporting the water will have specific directions to place an inflatable HDPE bath or container beneath the disconnect port to catch any drips The tanks and all piping to the disconnect port are double-contained for spill control

4 **Comment**

Will the tanks be alternately emptied so that one can serve as contingency capacity? Will the two tanks be connected so that a full tank will overflow into the adjacent empty one?

Response

The tanks will be alternately emptied so that one can serve as contingency capacity The two tanks are connected so that the full tank will overflow into the adjacent empty tank

5 **Comment**

Will it be necessary to drain the pond as stated in the assumption at the end of Section 3 1? Section 3 3 states that "minimal dewatering will be required "

Response

It will not be necessary to drain the pond as stated in the assumptions at the end of Section 3 1 The pond will be dewatered only to the extent that it accommodates the construction activities However, the pond will be completely dewatered prior to landfill closure Pond dewatering is part of a separate action The statement in Section 3 3 regarding minimal dewatering refers to dewatering included in this action

6 **Comment**

Because the two tanks have a combined 4 5-day capacity, the 90-day storage limit for hazardous waste should not become a problem and the tanks will not need to be permitted However, DOE should be attentive to the 90-day limit and all other RCRA requirements for 90-day hazardous waste storage units

Response

DOE will be attentive to the 90-day limit and all other RCRA requirements for 90-day hazardous waste storage units

7 **Comment**

The 5 cubic yards of excavated materials mentioned in Section 3 3 must be containerized, characterized, and disposed of in a manner which follows the protocol for investigation-derived waste

Response

DOE will follow the guidance from CDPHE and EPA received in August 15, and August 25, 1994, project meetings "Soil excavated during construction of the leachate collection system will be placed in the landfill" The guidance indicated that movement of excavated soil within the IHSS would not constitute placement and trigger LDRs DOE will also comply with all Rocky Flats procedures concerning waste characterization and disposal

8 **Comment**

To simplify the determination of performance standards, particularly in light of ongoing discussions of ARARs, adjust the language in Section 3 1 to require that the collected seep water to be treated at the OU2 Treatment facility and assure that the facility maintains its effluent standards Table 3-1 and reference to it can be removed to avoid any confusion

Response

DOE will modify the language in Section 3 1 to simplify the discussion of ARARs The statement will read to the effect that the collected seep water will be treated at the appropriate treatment facility to levels below the facility effluent standards Table 3-1 will then be modified to include only constituent, average concentration, and maximum concentration and will be moved to Section 2 3 - Characteristics of the Seep at SW097